# TABERNACLE DRUM DUMP NEW JERSEY EPA ID# NJD980761357

**EPA REGION 2**CONGRESSIONAL DIST. 03

Burlington County
Tabernacle Township

## **Site Description**

The Tabernacle Drum Dump site originated on a wooded, 1-acre parcel of undeveloped land located on Carranza Road in Tabernacle Township, in the northern region of the New Jersey Pine Barrens. Land in the area is used primarily for agriculture and recreation. Approximately 75 to 100 residents living within a 1-mile radius of the site are dependent on ground-water wells for potable and agricultural purposes. The Cohansey aquifer, which is a source of drinking water to most of the residents in the vicinity of the site, has a depth of approximately 100 feet. In a one-time dumping incident in the summer of 1976 or 1977, approximately 200 containers (55-gallon drums, 20-gallon containers, and several 5-gallon pails) of solvents, paint, and paint sludges were deposited on a 2,000-square-foot portion of the property. These containers were discovered by Tabernacle Township officials in 1982. The Burlington County Health Department inspected the site for the Township and referred the case to the New Jersey Department of Environmental Protection (NJDEP). NJDEP followed-up with a more detailed site inspection, collecting drum and soil samples which revealed the presence of carbon tetrachloride, benzene, toluene, ethylbenzene, xylenes, chromium and lead. Deterioration and leakage of some containers resulted in visible soil contamination. The drums and contaminated soil were removed in 1984.

Site Responsibility:

This site has been addressed through Federal and potentially responsible

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parties' actions.

**NPL LISTING HISTORY** 

Proposed Date: 09/01/83 Final Date: 09/01/84

### **Threats and Contaminants**





A 1988 investigation revealed that 1,1,1-trichloroethane and 1,1-dichloroethene were the major ground-water contaminants, and that chromium, cyanide, and lead were the major surface soil contaminants. Contaminated ground water was found to be migrating to the southeast, towards residential drinking water wells. The potential for ingestion of contaminated ground water posed the greatest threat to the residents. Trespassers entering the unfenced site could also be at risk from incidental ingestion of contaminated soil. In addition, EPA implemented a residential well sampling program to ensure that the drinking water meets health-based standards.

## Cleanup Approach

The site has been addressed in two stages; immediate actions (contaminated soil and container removal) and a long-term remedial phase focusing on cleanup of the ground water.

#### Response Action Status ————



**Immediate Actions:** In 1984, under EPA supervision, Atlantic Disposal Services (ADS), a potentially responsible party (PRP), performed an emergency action that consisted of removing containers, 40 cubic yards of drummed materials, 8 truckloads of excavated soil, and approximately 3,000 gallons of liquid material. The materials were disposed of at a facility permitted for the disposal of hazardous waste.



Remedial Investigation/Feasibility Study: EPA completed an investigation in June 1988. Contaminated ground water (the plume) was found to be migrating southeast of the original dump location, in the direction of potable wells utilized by residents on

Carranza Road. The plume is predominantly comprised of 1,1,1-trichloroethane and 1,1dichloroethene. The plume location was approximately 3,000 feet southeast of the original dump location.



**Record of Decision:** EPA selected a remedy on June 30, 1988. The selected remedy included extraction and on-site treatment of contaminated ground water; installation of additional ground-water monitoring wells to further delineate the extent of the

contaminant plume; implementation of a ground-water monitoring program for downgradient residential wells until the contaminant plume had been delineated; confirmatory soil sampling at the former drum dumping and storage area; and implementation of a ground-water monitoring program for a period of five years after site cleanup goals have been achieved.



**Remedial Design:** Design work for the ground-water remediation system began in 1991 and was completed in the fall of 1992.



**Remedial Action:** Construction work began in February, 1993 and was completed in

July, 1993. The ground-water remediation system started up on August 30, 1993.



Cleanup Completed: Cleanup goals stated in the ROD have been achieved. The ground-water remediation system was shut down in fall 1997. A five-year review was performed in 1999.

**Site Facts:** A Unilateral Order was issued in 1984 to ADS, requiring the company to remove the containers and to excavate contaminated soil. EPA sent Notice Letters to the PRPs in 1985. In 1989, EPA and USX signed a Consent Decree, requiring USX to perform the cleanup at the site.

# Cleanup Progress (Construction Completed)

In 1984, under EPA supervision, Atlantic Disposal Services (ADS), a potentially responsible party (PRP), numbered, logged, and sampled on-site containers. ADS completed a surface cleanup in 1984 that consisted of removing containers, 40 cubic yards of drummed materials, 8 truckloads of excavated soil, and approximately 3,000 gallons of liquid material.

Another PRP, USX Corporation, designed and constructed the groundwater remediation system pursuant to a 1989 Consent Decree. Beginning in 1993, approximately 7 million gallons of groundwater was extracted monthly from the aquifer and treated before reinjection. Ground-water cleanup levels were achieved at the site, and the remediation system was shut down. A five-year post remediation ground-water monitoring program was initiated in 1999.

# Environmental Progress



The removal of containers and contaminated soil from the original dump location reduced the risk for surficial exposure to hazardous substances. Ground-water cleanup has been completed.

# Site Repository



Administrator, Tabernacle Township, 163 Carranza Road, Tabernacle, New Jersey, 08088.